



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/046,379

01/10/2002

Jimmy N. Eavenson SR.

096311.010P2

1646

33805 7590 11/14/2007
WEGMAN, HESSLER & VANDERBURG
6055 ROCKSIDE WOODS BOULEVARD
SUITE 200
CLEVELAND, OH 44131

EXAMINER

HOGAN, JAMES SEAN

ART UNIT

PAPER NUMBER

3752

MAIL DATE

DELIVERY MODE

11/14/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/046,379

Applicant(s)

EAVENSON ET AL.

Examiner

James S. Hogan

Art Unit

3752

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 September 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6, 7, 10, 12, 15 and 17-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6, 7, 10, 12, 15, and 17-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim 6, 7, 10, 12, 15, and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,253,416 to Lauer et al in view of U.S. Patent No. 6,548,760 to Stout Jr.

As per claim 6 Lauer et al. discloses a blower (See Fig. 4) with a nozzle adapted for mounting on the discharge chute of the blower having a nozzle body having an inlet end, an outlet end, and a sloped region gradually reducing the height of the channel from the inlet end to the outlet end (see Fig. 21-23). Lauer et al does not teach the discharge chute as having a first cross-sectional area at the inlet and a second cross-sectional area at the outlet, where the second cross-sectional area is less than the first, and that the cross-sectional area is due to a change in shape in an upper portion of the nozzle body. Stout Jr. teaches a reducer that reduces down from a large cross-section (14) to a small cross section (20), and teaches the use that the reducer's change in shape has an effect on the velocity of the fluid going through it that would provide the logic that an inverted reducer would increase velocity at an upper region (outer circumference) than a lower region (inner circumference) of the channel (Col. 1, lines 35-39). Further, as per claim 6, 10 and 11, 15, 17, 18 and 19, the nozzle of Lauer et al includes parallel side walls defining a channel that is being open at an inlet end; the first

Art Unit: 3752

cross-sectional area, (i.e. an attachment region) and open at an outlet end, the second cross-sectional area. The sloped region gradually reduces a height of the channel from the inlet end to the outlet end and the lower is generally planar throughout a length (see Fig. 21-23). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the nozzle shape of Lauer et al with the nozzle shape taught by Stout Jr. in order to alter the velocity of air as it enters the nozzle at an inlet, and exits out of an outlet. As per claims 7 and 12, neither Lauer et al. or Stout Jr. teach the second cross-sectional area, the outlet end, being approximately 50% to 75% of the first cross-sectional area, the inlet end and the channel height of outlet end is approximately from 50% to 75% of the channel height of the inlet end. It would have been obvious matter of design choice to have made the second cross-sectional area, the outlet end, is approximately 50% to 75% of the first cross-sectional area, the inlet end and the channel height of outlet end is approximately from 50% to 75% of the channel height of the inlet end to provide a smaller opening at the outlet end to increase the velocity of the discharged air. As per claim 20, the nozzle of Lauer et al at the inlet end is the same shape as the shape of the discharge chute of such that the nozzle is mountable. Summarily, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have achieved higher upper-to-lower air velocities in a the blower nozzle of Lauer et al by shaping the nozzle with a change in shape as taught by Stout Jr., and to have sized the outlet within a percentage proportion to the inlet to achieved the desired upper-to-lower nozzle region air velocities.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure

U.S. Patent No. 6,003,199 to Shaffer

U.S. Patent No. 6,378,166 to Bruno et al

U.S. Patent No. 2,908,933 to Todd Jr. et al

U.S. Patent No. 5,689,852 to Svoboda et al.

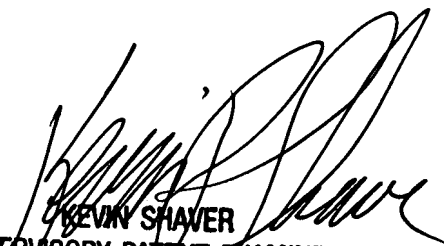
Any inquiry concerning this communication or earlier communications from the examiner should be directed to James S. Hogan whose telephone number is (571) 272-4902. The examiner can normally be reached on Mon-Fri, 7:00a-4:00p EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin P. Shaver can be reached on (571) 272-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3752

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JSH
11/13/2007



KEVIN SHAVER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700